

What we claim is:

1. Apparatus for sharing data over a network, having a plurality of network-connected terminals, each comprising,

5 visual display means;
 processing means;
 storage means; and
 memory means; wherein

said memory means includes

10 instructions to duplicate an object from a second of said network-connected terminals at a first of said network-connected terminals in response to a data requirement of said first terminal;

 instructions to access data in said object using locally executed object instructions at said first terminal; and

15 instructions to maintain data consistency between duplicated objects.

2. Apparatus according to claim 1, wherein said instructions are either stored in said storage means or are loaded from an external medium
20 and retrieved into said memory means.

3. Apparatus according to claim 1, wherein said instructions to maintain data consistency between duplicated objects monitor Central Processing Unit usage and network bandwidth utilisation.

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4. A method of sharing data over a network, having a plurality of network-connected terminals, each comprising memory means and

processing means, said memory means including instructions for managing object duplication, including steps of

(a) in response to a data requirement of a first of said network terminals, duplicating an object from a second of said network terminals at said first terminal;

(b) at said first terminal, accessing data in said object using locally executed object instructions; and

(c) maintaining data consistency between duplicated objects.

5 10 **5.** A method according to claim 4, wherein said object duplication instructions for managing object duplication constitutes a duplication manager.

15 **6.** A method according to claim 4, wherein said object from a second of said network terminals is a duplicate master.

7. A method according to claim 4, wherein said duplicated object at said first terminal is a duplicate.

20 **8.** A method according to claim 4, wherein said duplicate master updates said duplicate.

9. A method according to claim 4, wherein only one duplicate master exists for a group of duplicates.

25 **10.** A method according to claim 4, wherein the role of any of said duplicates within said group and the role of said duplicate master can be switched.

11. A method according to claim 10, wherein said switching is the result of a command, called load-balancing, or the result of an automatic fault-recovery process performed by the duplication manager.

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12. A method of sharing data over a network, having a plurality of network-connected terminals, each comprising memory means and processing means, said memory means including instructions for managing object duplication, including steps of:

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(a) in response to an availability of a list of said network terminals, duplicating an object from a second of said network terminals at said first terminal;

(b) at said first terminal, accessing data using locally executable object instructions; and

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(c) maintaining data consistency between duplicated objects.

13. A method according to claim 12, wherein said object duplication instructions for managing object duplication constitute a duplication manager.

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14. A method according to claim 12, wherein said object from a second of said network terminals is a duplicate master;

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15. A method according to claim 12, wherein said duplicated object at said first terminal is a duplicate;

16. A method according to claim 12, wherein said duplicate

master updates said duplicate;

17. A method according to claim 12, wherein only one duplicate master exists for a group of duplicates.

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18. A method according to claim 12, wherein the role of any of said duplicates within said group and the role of said duplicate master can be switched.

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19. A method according to claim 18, wherein said switching is the result of a command, called load-balancing, or the result of an automatic fault-recovery process performed by the duplication manager.

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20. A computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will perform the steps of

(a) in response to a data requirement of a first network terminal of a plurality of network terminals, duplicating an object from a second of said plurality of network terminals at said first terminal;

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(b) at said first terminal, accessing data in said object using locally executed object instructions; and

(c) maintaining data consistency between duplicated objects.

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21. A computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will perform the steps of

(a) in response to an availability of a list of network terminals,

duplicating an object from a second of said network terminals at a first of said terminals;

(b) at said first terminal, facilitating data access using locally executable object instructions; and

5 (c) maintaining data consistency between duplicated objects.

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